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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,529	06/06/2001	Gerald E. Janusz	RF000/000RF-U	6949

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EXAMINER	
CHO, UN C	

ART UNIT	PAPER NUMBER
2682	11

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/875,529	JANUSZ ET AL.	
	Examiner	Art Unit	
	Un C Cho	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-37 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4,7 and 9.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 9/7/2001, 4/11/02 and 9/28/02 were filed after the mailing date of the Application #09/875,529 on 6/6/2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 – 3, 7 – 13, 15, 34, 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya et al. (US 6,490,459) in view of Larsson et al. (US 6,535,498).

Regarding claim 1, Sugaya teaches attaching and operably connecting a wireless transceiver to each apparatus (Sugaya, Col. 1, lines 15 – 23), the wireless transceiver including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22), positioning a branch station (Sugaya, Fig. 2, 3 and 6) in the vicinity of the plurality of apparatus, the branch station including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22) and the branch station being in

communication with the central control station (Sugaya, Fig. 2, 10), upon occurrence of a predetermined event (Sugaya, Col. 7, lines 10 – 12), the control unit associated with one of the wireless transceiver initiating transmission of a signal through the wireless processing unit and the signal containing the identification of (Sugaya, Col. 3, lines 54 – 63) and the status of the apparatus (Sugaya, Col. 5, lines 33 – 43), the signal being received by the wireless transceiver associated with one or more neighboring wireless transceiver (Sugaya, Col. 7, lines 10 – 25) and the branch station communicating the signal to the central control station (Sugaya, Col. 8, lines 4 – 11). However, Sugaya fails to teach that each of the receiving transceiver modules making a decision as to whether to re-transmit the messaged based on a determination of whether the transceiver module is on a designated path between the transceiver module from which the message originated and the area control module, re-transmission of the message continuing along the designated path until the message is received at the area control module. In contrast, Larsson teaches that each of the neighboring nodes making a decision as to whether to re-transmit the message based on a determination of whether the node is on a designated path between the node from which the message originated and the destination node (Larsson, Col. 2, lines 46 - 55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Larsson to Sugaya to allow reactive ad-hoc routing protocols to determine

whether more optimal routes exist between the source node and the destination node.

Regarding claim 2, Sugaya as modified by Larsson teaches that signaling can be initiated from the central control station, communicated to the branch station for subsequent transmission to one or more intended wireless transceiver, the branch station transmitting the signal to one or more receiving transceiver modules within its transmission range (Sugaya, Col. 6, lines 34 – 48), each of the neighboring nodes making a decision as to whether to re-transmit the message based on a determination of whether the node is on a designated path between the node from which the message originated and the destination node (Larsson, Col. 2, lines 46 - 55).

Regarding claim 3, Sugaya as modified by Larsson teaches the one or more intended wireless transceivers, upon receipt of the control signal, execute the instructions contained therein (Sugaya, Col. 5, lines 14 – 21).

Regarding claim 7, Sugaya as modified by Larsson teaches that the predetermined event is a prompt based on a predetermined schedule (Sugaya, Col. 7, lines 1 – 5).

Regarding claim 8, Sugaya as modified by Larsson teaches that the predetermined event is the receipt of certain status information by the control unit (Sugaya, Col. 5, lines 14 – 21 and Col. 7, lines 10 – 12).

Regarding claim 9, Sugaya as modified by Larsson teaches that the predetermined event is the receipt of a control signal (Sugaya, Col. 5, lines 14 – 21 and Col. 7, lines 10 – 12).

Regarding claim 10, Sugaya as modified by Larsson teaches that the control unit of each wireless transceiver executes processing stored in an internal memory for coordinating function and control of the wireless transceiver (Sugaya, Col. 5, lines 14 – 32).

Regarding claim 11, Sugaya as modified by Larsson teaches that a unique code is stored in the internal memory for identifying the particular wireless transceiver (Sugaya, Col. 3, lines 57 – 63 and Col. 5, lines 29 – 32).

Regarding claim 12, Sugaya as modified by Larsson teaches that data required for communication control of the wireless transceiver is temporality stored in the internal memory (Sugaya, Col. 5, lines 29 – 32).

Regarding claim 13, Sugaya as modified by Larsson teaches that the radio transceiver associated with each wireless transceiver operate in an unlicensed band (Larsson, Col. 1, lines 40 – 49).

Regarding claim 15, Sugaya as modified by Larsson teaches that the control unit (Sugaya, Fig. 3, 25) of the wireless transceiver has an integral clock function (Sugaya, Col. 8, lines 36 – 39).

Regarding claim 34, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 35, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 37, Sugaya as modified by Larsson teaches attaching and operably connecting a wireless transceiver to each apparatus (Sugaya, Col. 1, lines 15 – 23), the wireless transceiver including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22) operating in the unlicensed 2.4GHz Industrial-Scientific-Medical (ISM) band (Larsson, Col. 1, lines 48 – 49), positioning an branch station (Sugaya, Fig. 2, 3 and 6) in the vicinity of the plurality of apparatus, the branch station including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22) and the branch station being in communication with the central control station (Sugaya, Fig. 2, 10), upon occurrence of a predetermined event (Sugaya, Col. 7, lines 10 – 12), the control unit associated with one of the wireless transceiver initiating transmission of a signal through the wireless processing unit and the signal containing the identification of (Sugaya, Col. 3, lines 54 – 63) and the status of the apparatus (Sugaya, Col. 5, lines 33 – 43), the signal being received by the wireless transceiver associated with one or more neighboring wireless transceiver (Sugaya, Col. 7, lines 10 – 25), each of the neighboring nodes making a decision as to whether to re-transmit the message based on a determination of whether the node is on a designated path between the node from which the message originated and the destination node (Larsson, Col. 2,

lines 46 - 55) and the branch station communicating the signal to the central control station (Sugaya, Col. 8, lines 4 – 11).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya in view of Larsson as applied to claim 1 above, and further in view of Eichstaedt et al. (US 6,218,958).

Regarding claim 4, Sugaya as modified by Larsson teaches the limitations of claim 3. However, Sugaya as modified by Larsson fails to teach that each transceiver module further includes at least one actuation component for manipulating the operation of the working component based on instructions contained in the control message. In contrast, Eichstaedt teaches a tactile notification device (Eichstaedt, Fig. 1, 12 and Fig. 2) including at least one actuation component (processor, Eichstaedt, Fig. 2, 30) for manipulating the operation of a motor (Eichstaedt, Fig. 2, 30) based on instructions contained in the received signal (Eichstaedt, Col. 3, line 56 through Col. 4, line 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Eichstaedt to Sugaya and Larsson to provide a system which includes a tactile notification device that can be worn by a person and that defines a tactile surface facing the person so that the tactile notification device generates one or more person-detectable tactile signals when activated.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya in view of Larsson as applied to claim 1 above, further in view of Eichstaedt et al. (US 6,218,958) and further in view of Belvin et al. (US 6,717,529).

Regarding claim 5, Sugaya as modified by Larsson fails to teach that each transceiver module further includes one or more sensors for sensing various operational parameters representative of the status of the working component to which the transceiver module is secured, each such sensor communicating the status information to the micro-controller of the transceiver module for interpretation by a diagnostics processor integral to the micro-controller and then subsequent transmission through the radio transceiver. However, Eichstaedt teaches that a wireless transceiver includes a pressure sensor (Eichstaedt, Fig. 2, 38) for sensing various operational parameters representative of the status of the tactile notification device to which the wireless transceiver is secured, the pressure sensor communicating the status information to the processor of the wireless transceiver for interpretation by the processor (Eichstaedt, Col. 4, lines 19 – 26). Moreover, Belvin teaches transmission of a sensor status through the remote transmit unit (Belvin, Fig. 1, 26A) to the base station receiver (Belvin, Fig. 1, 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Belvin and Eichstaedt to Sugaya and Larsson to provide a telemetry system including a remote unit having a remote input unit coupled to a remote transmit unit in which the remote input unit receiving one or more sensor output signals and producing a sensor

status signal dependent upon the sensor output signal and transmitting the signal to a base unit.

Regarding claim 6, Sugaya as modified by Larsson, Eichstaedt and Belvin teaches a tactile notification device (Eichstaedt, Fig. 1, 12 and Fig. 2) including at least one actuation component (processor, Eichstaedt, Fig. 2, 30) for manipulating the operation of a motor (Eichstaedt, Fig. 2, 30) based on instructions contained in the received signal (Eichstaedt, Col. 3, line 56 through Col. 4, line 1).

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya in view of Larsson as applied to claim 1 above, and further in view of Gatherer et al. (US 2002/0065058).

Regarding claim 14, Sugaya as modified by Larsson fails to teach that the radio transceivers associated with each wireless transceiver operate at power levels no more than 500mW. However, Gatherer teaches that Bluetooth transceivers operate at a maximum power of 100mW (Gatherer, Paragraph 0031, lines 7 – 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Gatherer to Sugaya and Larsson to increase the improved utilization of the aggregate communication capacity provided by a concentrated plurality of local wireless communication networks and decreasing power requirements for the devices in the ad hoc networks.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya in view of Larsson and further in view of Gatherer et al. (US 2002/0065058).

Regarding claim 36, Sugaya as modified by Larsson teaches attaching and operably connecting a wireless transceiver to each apparatus (Sugaya, Col. 1, lines 15 – 23), the wireless transceiver including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22), positioning a branch station (Sugaya, Fig. 2, 3 and 6) in the vicinity of the plurality of apparatus, the branch station including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22) and the branch station being in communication with the central control station (Sugaya, Fig. 2, 10), upon occurrence of a predetermined event (Sugaya, Col. 7, lines 10 – 12), the control unit associated with one of the wireless transceiver initiating transmission of a signal through the wireless processing unit and the signal containing the identification of (Sugaya, Col. 3, lines 54 – 63) and the status of the apparatus (Sugaya, Col. 5, lines 33 – 43), the signal being received by the wireless transceiver associated with one or more neighboring wireless transceiver (Sugaya, Col. 7, lines 10 – 25), each of the neighboring nodes making a decision as to whether to re-transmit the message based on a determination of whether the node is on a designated path between the node from which the message originated and the destination node (Larsson, Col. 2, lines 46 - 55) and the branch station communicating the signal to the central control station (Sugaya, Col. 8, lines 4 – 11). However, Sugaya as modified by Larsson fails to teach that

a radio transceiver is operating at a power level no more than 500mW. In contrast, Gatherer teaches that Bluetooth transceivers operate at a maximum power of 100mW (Gatherer, Paragraph 0031, lines 7 – 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Gatherer to Sugaya and Larsson to increase the improved utilization of the aggregate communication capacity provided by a concentrated plurality of local wireless communication networks and decreasing power requirements for the devices in the ad hoc networks.

8. Claims 16 – 18, 22 – 28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya et al. (US 6,490,459) in view of Larsson et al. (US 6,535,498) and further in view of Novik (US 6,339,745).

Regarding claim 16, Sugaya as modified by Larsson teaches attaching and operably connecting a wireless transceiver to each apparatus (Sugaya, Col. 1, lines 15 – 23), the wireless transceiver including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22), positioning a branch station (Sugaya, Fig. 2, 3 and 6) in the vicinity of the plurality of apparatus, the branch station including at least a control unit (Sugaya, Fig. 3, 25) and a wireless processing unit (Sugaya, Fig. 3, 22) and the branch station being in communication with the central control station (Sugaya, Fig. 2, 10), upon occurrence of a predetermined event (Sugaya, Col. 7, lines 10 – 12), the control unit associated with one of the wireless transceiver initiating transmission of a

signal through the wireless processing unit and the signal containing the identification of (Sugaya, Col. 3, lines 54 – 63) and the status of the apparatus (Sugaya, Col. 5, lines 33 – 43), the signal being received by the wireless transceiver associated with one or more neighboring wireless transceiver (Sugaya, Col. 7, lines 10 – 25), each of the neighboring nodes making a decision as to whether to re-transmit the message based on a determination of whether the node is on a designated path between the node from which the message originated and the destination node (Larsson, Col. 2, lines 46 - 55) and the branch station communicating the signal to the central control station (Sugaya, Col. 8, lines 4 – 11). However, Sugaya as modified by Larsson fails to teach a network support server in communication with the area control module and one or more display and control units in communication with the network support server, the network support server analyzing the message and communicating the status information contained therein to the one or more display and control units for review by an end user. In contrast, Novik teaches a computer system (Novik, Fig. 1, 106) in communication with the base station (Novik, Fig. 1, 108) inherently having one or more display and control unit in communication with the computer system, the computer system analyzing the message and communication the status information contained therein to the one or more display and control units for review by a user (Novik, Col. 4, lines 29 – 37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Novik to Sugaya and

Larsson to provide a tracking system to allow a user to monitor a wide variety of text data, graphical display and interactive communication functions in regards to the fleet of vehicles being monitored by the tracking system.

Regarding claim 17, Sugaya as modified by Larsson and Novik teaches that the end user can initiate a control message containing instructions through the display and control units (Novik, Col. 8, lines 50 – 54), signaling can be initiated from the central control station, communicated to the branch station for subsequent transmission to one or more intended wireless transceiver, the branch station transmitting the signal to one or more receiving transceiver modules within its transmission range (Sugaya, Col. 6, lines 34 – 48), each of the neighboring nodes making a decision as to whether to re-transmit the message based on a determination of whether the node is on a designated path between the node from which the message originated and the destination node (Larsson, Col. 2, lines 46 - 55).

Regarding claim 18, Sugaya as modified by Larsson and Novik teaches the one or more intended wireless transceivers, upon receipt of the control signal, execute the instructions contained therein (Sugaya, Col. 5, lines 14 – 21).

Regarding claim 22, Sugaya as modified by Larsson and Novik teaches that the predetermined event is a prompt based on a predetermined schedule (Sugaya, Col. 7, lines 1 – 5).

Regarding claim 23, Sugaya as modified by Larsson and Novik teaches that the predetermined event is the receipt of certain status information by the control unit (Sugaya, Col. 5, lines 14 – 21 and Col. 7, lines 10 – 12).

Regarding claim 24, Sugaya as modified by Larsson and Novik teaches that the predetermined event is the receipt of a control signal (Sugaya, Col. 5, lines 14 – 21 and Col. 7, lines 10 – 12).

Regarding claim 25, Sugaya as modified by Larsson and Novik teaches that the control unit of each wireless transceiver executes processing stored in an internal memory for coordinating function and control of the wireless transceiver (Sugaya, Col. 5, lines 14 – 32).

Regarding claim 26, Sugaya as modified by Larsson and Novik teaches that a unique code is stored in the internal memory for identifying the particular wireless transceiver (Sugaya, Col. 3, lines 57 – 63 and Col. 5, lines 29 – 32).

Regarding claim 27, Sugaya as modified by Larsson and Novik teaches that data required for communication control of the wireless transceiver is temporality stored in the internal memory (Sugaya, Col. 5, lines 29 – 32).

Regarding claim 28, Sugaya as modified by Larsson and Novik teaches that the radio transceiver associated with each wireless transceiver operate in an unlicensed band (Larsson, Col. 1, lines 40 – 49).

Regarding claim 30, the claim is interpreted and rejected for the same reason as set forth in claim 16.

Regarding claim 31, the claim is interpreted and rejected for the same reason as set forth in claim 17.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya in view of Larsson and Novik as applied to claim 16 above, and further in view of Eichstaedt et al. (US 6,218,958).

Regarding claim 19, Sugaya as modified by Larsson and Novik teaches the limitations of claim 18. However, Sugaya as modified by Larsson and Novik fails to teach that each transceiver module further includes at least one actuation component for manipulating the operation of the working component based on instructions contained in the control message. In contrast, Eichstaedt teaches a tactile notification device (Eichstaedt, Fig. 1, 12 and Fig. 2) including at least one actuation component (processor, Eichstaedt, Fig. 2, 30) for manipulating the operation of a motor (Eichstaedt, Fig. 2, 30) based on instructions contained in the received signal (Eichstaedt, Col. 3, line 56 through Col. 4, line 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Eichstaedt to Sugaya, Larsson and Novik to provide a system which includes a tactile notification device that can be worn by a person and that defines a tactile surface facing the person so that the tactile notification device generates one or more person-detectable tactile signals when activated.

10. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya as modified by Larsson, Novik as applied to claim 16 above, further in view of Eichstaedt et al. and further in view of Belvin et al. (US 6,717,529).

Regarding claim 20, Sugaya as modified by Larsson, Novik fails to teach that each transceiver module further includes one or more sensors for sensing various operational parameters representative of the status of the working component to which the transceiver module is secured, each such sensor communicating the status information to the micro-controller of the transceiver module for interpretation by a diagnostics processor integral to the micro-controller and then subsequent transmission through the radio transceiver. However, Eichstaedt teaches that a wireless transceiver includes a pressure sensor (Eichstaedt, Fig. 2, 38) for sensing various operational parameters representative of the status of the tactile notification device to which the wireless transceiver is secured, the pressure sensor communicating the status information to the processor of the wireless transceiver for interpretation by the processor (Eichstaedt, Col. 4, lines 19 – 26). Moreover, Belvin teaches transmission of a sensor status through the remote transmit unit (Belvin, Fig. 1, 26A) to the base station receiver (Belvin, Fig. 1, 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Belvin to Sugaya, Larsson, Novik and Eichstaedt to provide a telemetry system including a remote unit having a remote input unit coupled to a remote transmit unit in which the remote input unit receiving one or more sensor

output signals and producing a sensor status signal dependent upon the sensor output signal and transmitting the signal to a base unit.

Regarding claim 21, Sugaya as modified by Larsson, Novik, Eichstaedt and Belvin teaches a tactile notification device (Eichstaedt, Fig. 1, 12 and Fig. 2) including at least one actuation component (processor, Eichstaedt, Fig. 2, 30) for manipulating the operation of a motor (Eichstaedt, Fig. 2, 30) based on instructions contained in the received signal (Eichstaedt, Col. 3, line 56 through Col. 4, line 1).

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya as modified by Larsson and Novik as applied to claim 16 above, and further in view of Gatherer et al. (US 2002/0065058).

Regarding claim 29, Sugaya as modified by Larsson and Novik fails to teach that the radio transceivers associated with each wireless transceiver operate at power levels no more than 500mW. However, Gatherer teaches that Bluetooth transceivers operate at a maximum power of 100mW (Gatherer, Paragraph 0031, lines 7 – 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Gatherer to Sugaya and Larsson to increase the improved utilization of the aggregate communication capacity provided by a concentrated plurality of local wireless communication networks and decreasing power requirements for the devices in the ad hoc networks.

12. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugaya as modified by Larsson and Novik as applied to claim 30 above, and further in view of Jampolsky et al. (US 2003/0190912).

Regarding claim 32, Sugaya as modified by Larsson and Novik teaches the limitation of claim 31. However, Sugaya as modified by Larsson and Novik fails to teach the control and display units are in communication with the network support server through an information network. In contrast, Jampolsky teaches the control and display units (Jampolsky, Fig. 1, 64) are in communication with the network server (Jampolsky, Fig. 1, 66) through an information network (Jampolsky, Fig. 1, 62) (Jampolsky, Page 4, Paragraph 0040, lines 10 – 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Jampolsky to Sugaya, Larsson and Novik to provide a wireless telecommunications network that is operable to collect and report data relating to the status and use of a wireless phone or other telecommunications device in near real-time in response to data collection requests made by the subscribers or other authorized persons.

Regarding claim 33, Sugaya as modified by Larsson, Novik and Jampolsky teaches that the information network in the Internet (Jampolsky, Page 4, Paragraph 0040, lines 10 – 15).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C Cho whose telephone number is (703)305-8725. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (703)308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Un C Cho UC 6/23/04
Examiner
Art Unit 2682

LEE NGUYEN
PRIMARY EXAMINER